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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,420

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Oscar Hendrikus Willemsen

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

DOAK, JENNIFER L

ART UNIT

PAPER NUMBER

2872

MAIL DATE

DELIVERY MODE

10/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,420

Applicant(s)

WILLEMSSEN, OSCAR
HENDRIKUS

Examiner

Jennifer L. Doak

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/15/07</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Berge reference</u> . |

DETAILED ACTION***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 8/15/07 has been considered by the examiner. However, Examiner suspects that a typographical error occurred, since cited reference US 6,416,158 is directed to Ballistic Aerosol Marking (and not to any sort of optical system or element), and it does not appear to have an inventor named Smith, as described in the IDS. Additionally, although the Non-Patent Literature document was not previously entered into the record in its entirety, Examiner was able to locate it on IEEExplore, and it is included herewith so as to be fully entered into the record.

Election/Restrictions

Newly submitted claim 6 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The claims can be broken into the following groups:

Group I: Claims 2-3, drawn to lens element, classified in class 359, subclass 365.

Group II: Claims 4-5, drawn to the scanner, classified in class 359, subclass 202.

Group III: Claim 6, drawn to a rear display, classified in class 353, subclass 31.

Inventions I, II, and III are directed to related products. The related inventions are distinct if (1) the inventions as claimed are either not capable of use together or can have a materially different design, mode of operation, function, or effect; (2) the inventions do not overlap in scope, i.e., are mutually exclusive; and (3) the inventions as claimed are not obvious variants. See MPEP § 806.05(j). In the instant case, the inventions as claimed have materially different functions and effects. Furthermore, the inventions as claimed do not encompass overlapping

Art Unit: 2872

subject matter since each invention includes mutually exclusive subject matter not found in the other inventions, as set forth above in the listing of inventions, and there is nothing of record to show them to be obvious variants.

Claim 1 is a linking claim for Groups I-III.

Since applicant has received an action on the merits for the originally presented invention (Groups I and II), this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 6 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (US 6,317,170) (hereinafter Hwang) in view of Aizenberg et al. (US 2004/0174610) (hereinafter Aizenberg).

Regarding Claims 1-3, Hwang et al. disclosed a projection device, comprising:

- means for directing a plurality of light beams (150) onto
- a scanning device (900), adapted to scan the beams in order to project
- an image on a surface (1000),
- a lens is arranged in the optical path of the beams after the scanner so that the scanner is located between the lens and its focal length (col. 2, line 41-45);

Hwang et al. fails to teach that an adjustable lens arranged in the optical path of the beams after the scanner so that the scanner is located between the lens and its focal length; Hwang et al. fails to teach that the lens is an electro-wetting lens wherein the lens has at least two refractive planes. Aizenberg et al. discloses an adjustable lens (Figs. 1B and 1C; para. [0022], [0033]-[0035]); wherein the lens is an electro-wetting lens (para. [0022], [0033]-[0035]); the lens has at least two refractive planes (para. [0030]), insofar as the confining liquid and the refractive optical lens have different refractive indices wherein lies a plane in each.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hwang to include the adjustable, electro-wetting lens of Aizenberg, since the adjustable, electro-wetting lens has a tunable or adjustable focal length and transmissivity and did so in a manner that reduces complication and expense.

Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. (US 6,317,170), (hereinafter Hwang), in view of Aizenberg et al. (US 2004/0174610), (hereinafter Aizenberg), in further view of Callison et al. (US 2002/0180869), (hereinafter Callison).

Regarding Claim 4 and 5, the modified Hwang and Aizenberg disclose all the elements of Claim 1, from which this claim depends. Hwang further discloses that the beams are of different color (Fig. 3: (150); col. 8, lines 36-59), wherein the projection device comprises means to modulate (Fig. 3:(700); col. 8, lines 36-59) the beams and to form one combined beam (Fig. 3). Hwang et al. fails to disclose that the scanner is a two-dimensional scanner arranged to scan the combined beam in a raster pattern, and further that the scanner is arranged to scan the array of beams in a second direction. Hwang and Callison et al are related as projection devices. Callison

Art Unit: 2872

teaches that a scanner (Fig. 9) is a two-dimensional scanner arranged to scan the combined beam in a raster pattern (Abstr). Callison et al. further teaches that the scanner is arranged to scan an array of beams in a second direction (Abstr.; para. [0025]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hwang to include the two-dimensional scanner as taught in Callison, since simultaneous raster scanning of multiple lines enables higher resolution, brightness, and frame rates with available economical components.

Response to Arguments

Applicant's arguments filed 8/22/07 have been fully considered but they are not persuasive.

Applicant argues that the scanning system of Hwang's Fig. 3 should not be that shown in Fig. 1, since it is indicated as Prior art; that the size of the image in Hwang is determined by the scanning system and not an adjustable lens; that Hwang teaches away from an adjustable lens, and that Huang does not teach an adjustable lens; that the Hwang scanner is not between the adjustable lens and its focal length, and therefore the reference teaches away; that Aizenburg is not a projection device, so there is a teaching away from the combination, and there is no motivation to combine with reasonable expectation of success; and Examiner used impermissible hindsight.

However, Hwang's Fig. 3 only recites a means for scanning, and Examiner notes that Fig. 1 (85) is a scanning system. Nothing else in the reference cites a scanning system, so it must have been intended for the system of Fig. 3 as a means of scanning.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., image size

Art Unit: 2872

determination is accomplished) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Hwang does not teach an adjustable lens, nor was that element the purpose of citing it as a reference, as is clearly shown in the *Graham v. Deere* analysis of the First Action. Applicant argues that the reference teaches away. However, it has been held that such nonpreferred embodiments failing to assert discovery beyond that known in the art does not constitute a "teaching away" unless such disclosure criticizes, discredits, or otherwise discourages the solution claimed. *In re Susi*, 440 F.2d 442, 169 USPQ 423 (CCPA 1971), *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994), *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004), (see MPEP §2124).

Furthermore, "[t]he prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004). (MPEP §2124).

In this case, neither discredit was attributed to the combination by the references, nor does the combination destroy the references. Mere lack of mention does not "teach away." Examiner finds no teaching away.

In response to Applicant's argument that the Hwang scanner is not between the adjustable lens and focal length, Examiner notes that the scanner of Hwang's Fig. 1 is within the optical focal length of lenses (34). Applicant did not explicitly disclose whether the scanner was

Art Unit: 2872

optically or physically between the lens and its focal length, and therefore, Examiner has read the limitation broadly, making a reasonable interpretation that the scanner is optically between the lens and its focal point. Additionally, no discredit or destruction of references results, therefore there is no teaching away.

In response to Applicant's argument that Aizenburg is not a projection device and therefore there would be no reasonable expectation of success and thus teaches away from the combination, it should be noted that "Obviousness does not require absolute predictability, however, at least some degree of predictability is required. Evidence showing there was no reasonable expectation of success may support a conclusion of nonobviousness. *In re Rinehart*, 531 F.2d 1048, 189 USPQ 143 (CCPA 1976)," as cited at MPEP §2143.02. In this case, the references cited are related as optical system and optical element, both classified in US Class 359, therefore Examiner finds reasonable expectation of success. Applicant is invited to supply evidence to support a conclusion of no reasonable expectation of success, at which time this issue would be reconsidered. Additionally, it should be noted that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). Further, and again, no discredit or destruction of references results, therefore there is no teaching away.

In response to Applicant's allegation that there is no motivation to combine, Applicant is reminded that motivation was supplied as part of the original Office Action, and is reasserted

Art Unit: 2872

here: one would have been motivated to make the combination since the adjustable, electro-wetting lens has a tunable or adjustable focal length and transmissivity and did so in a manner that reduces complication and expense. This motivation was found in Aizenburg on page 1.

Finally, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

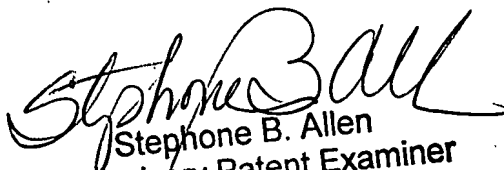
Art Unit: 2872

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Doak whose telephone number is 571-272-9791. The examiner can normally be reached on Mon-Thur: 7:30A-5:00P, Alt Fri: 7:30A-4:00P (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JD
10/04/07


Stephone B. Allen
Supervisory Patent Examiner